



## ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull

John F. Hagen, Acting Director

RDMU99.11

Last update: March 2, 1999

### ADEQ RECYCLING PROGRAM GRANT-FUNDED RESOURCES

The following is a list of resources resulting from grant projects funded by the Arizona Department of Environmental Quality's Recycling Program. The listing has been provided in this format: Organization, Document Name, Publication Date, Title of Grant Project, Type of Grant Project and Document Type. To obtain copies of the resources listed below, you may call the Arizona Recycling Program at (602) 207-4865, or call toll free in Arizona at 1-800-234-5677 ext. 4865.

#### TECHNICAL REPORTS:

Advanced Environmental Systems, Inc. and Arizona Sheet Fabrication Inc., *Post Consumer Mixed Grade Thermoplastic Wood Substitute*, 1992, "Post Consumer Mixed Grade Thermoplastic Wood Substitute", Reduce, Reuse and Recycle Grant. Final grant report.

Arizona Clean and Beautiful/Gainer and Associates' Workshops, *Recycling Entrepreneurship in Arizona*, 1992, "Recycling Entrepreneurship in Arizona", Reduce, Reuse and Recycle Grant. Final grant report.

Arizona Organic Products, *Wood Waste Recovery Facility*, 1994, "Wood Waste Recovery Facility", Waste Reduction Assistance Grant. Grant report.

Atwell Salvage and Demolition Inc., *Construction Materials Recycling*, 1991, "Recycling of Construction Materials", Reduce, Reuse and Recycle Grant. Grant report.

Continental Circuits Corporation, *Circuit Board Scrap Recycling Project*, 1991, "Circuit Board Recycling Project", Reduce, Reuse and Recycle Grant. Final grant report.

City of Flagstaff, *Commercial Waste Survey*, 1991, "Commercial Waste Audit and Pilot Recycling Program", Reduce, Reuse and Recycle Grant. Grant report.

City of Flagstaff, *Flagstaff Conservation Enrichment Units*, 1992, "City of Flagstaff Environmental Education", Reduce, Reuse and Recycle Grant. Final grant report.

Growing Connections, Inc., *Teaching Reduce, Reuse, and Charity to School Children*, 1991, "Teaching Reduce, Reuse, and Charity to School Children", Reduce, Reuse and Recycle Grant. Final grant report.

Metallurgical and Biological Extraction Systems, Inc. (MBX), *Source Reduction and Recycling of Mine Waste Through Mineral Bioprocessing*, 1991, "Source Reduction and Recycling of Mine Waste Through Mineral Bioprocessing", Reduce, Reuse and Recycle Grant. Final grant report.

Metallurgical and Biological Extraction Systems, Inc. (MBX), *Removal and Reuse of Aluminum Dross*, 1991, "Removal and Reuse of Aluminum Dross", Reduce, Reuse and Recycle Grant. Final grant report.

Northern Arizona University, *NAU Recycles, Report and Guidelines*, 1991, "Northern Arizona University Campus Wide Aluminum Collection Buy-Back Center and Catalog Paper Recovery", Reduce, Reuse and Recycle Grant. Final grant report.

Phoenix Center for Community Development, *The Arizona Small Business Reduce, Reuse, Recycle Guide*, 1991, Reduce, Reuse and Recycle Grant. Final grant report.

Phoenix Metro Desert Compost (The Groundskeeper), *Phoenix Metropolitan Desert Compost Facility*, 1994, "Phoenix Metro Desert Compost (The Groundskeeper)", Waste Reduction Assistance Grant. Final grant report. Report and summary on the processing and marketing of the material produced by Phoenix Metro Desert Compost.

Pima County, Arizona, *Pima County, Arizona Compost Project*, 1993, "Pima County, Arizona Compost Project", Reduce, Reuse and Recycle Grant. Final grant report.

Pinal County Triple R Co-Op, *Triple R Co-Op Pinal County, Arizona*, 1991, "Pinal County Triple R Co-Op", Reduce, Reuse and Recycle Grant. Final grant report. Describes the establishment of a regional market development program.

Pinal County, Arizona Triple R Co-Op, *The Composting Workshop*, 1993, "The Composting Workshop", Reduce, Reuse and Recycle Grant. Grant report.

R & W Recycling (aka New World Recycling), *The Old Corrugated Cardboard Recovery Project*, 1994, Waste Reduction Assistance Grant. Grant report.

Recycling Industries, Inc., *Development and Issues and Feasibility Analysis for Recycling Industries, Inc. of Phoenix, Arizona*, 1992, "Freon Removal From Discarded Appliances", Reduce, Reuse and Recycle Grant. Grant report.

SASCO Products Inc., *Research for the Development of a Reuse, and Recycling Protocol for Discarded Appliances (White Goods)*, 1991, "Development of a Reuse and Recycling Protocol for Discarded Appliances", Reduce, Reuse and Recycle Grant. Grant report.

Santa Cruz County/City of Nogales, *Material Recovery Facility Feasibility Study*, 1991, “Santa Cruz/Nogales MRF Study and Recycling Project”, Reduce, Reuse and Recycle Grant. Grant report.

Sedona Recycles, Inc., *Sedona Recycles, Inc. - Community Recycling Center*, 1994, “Sedona Recycles, Inc.”, Waste Reduction Assistance Grant. Final grant report. Photos showing recycling facility throughout construction process and graph indicating pounds of material recycled.

Southwest Public Recycling Association, *Southwest Public Recycling Association Market Development Program for the Southwest Region*, 1991, “Southwest Public Recycling Association Market Development Program for the Southwest Region”, Reduce, Reuse and Recycle Grant. Grant report.

Southwest Public Recycling Association, *Attachment B, Arizona Cooperative Marketing Photo Journal, SPRA Second Quarter Report*, 1993, “Southwest Public Recycling Association, Attachment B, Arizona Cooperative Marketing Photo Journal”, Reduce, Reuse and Recycle Grant. Grant report. (slides)

City of Tucson, *A Model for a Comprehensive Waste Reduction Procurement Program - Technical Guide for Purchasing Officials*, 1991, “City of Tucson Comprehensive Waste Reduction Model”, Reduce, Reuse and Recycle Grant. Guide book.

Tucson Organic Gardeners, *Home Composting Education Program*, 1991, “Tucson Organic Gardener’s Home Composting Program”, Reduce, Reuse and Recycle Grant. Grant report.

University of Arizona, *The Characterization of Commercial Solid Waste in Tucson, Arizona*, 1991, “University of Arizona Commercial Solid Waste Characterization of the Tucson Metropolitan Area”, Reduce, Reuse and Recycle Grant. Final grant report.

University of Arizona, *A Characterization of the Solid Wastes of City of Tucson Governmental Agencies*, 1993, “A Characterization of the Solid Wastes of City of Tucson Governmental Agencies”, Reduce, Reuse and Recycle Grant. Grant report.

## **BROCHURES/PAMPHLETS:**

Agua Fria-New River Natural Resource Conservation District, “The Earthworm Tunnel”, 1997, Waste Reduction Initiative Through Education Grant. A walk-through tunnel that demonstrates composting of household organic wastes through worm composting. The Earthworm Tunnel demonstration project is located at Duncan Family Farms in Litchfield, Arizona. Composting curriculum developed as a supplement.

Environmental Education Exchange, *Mission 3R-A Challenge for Change, An Interactive Exploration into the World of Solid Waste and Recycling*, 1995, Waste Reduction Initiative Through Education Grant. Software program, teacher's guide and promotional brochure on interactive software program.

City of Scottsdale, Brochure Series, 1995, Waste Reduction Initiative Through Education Grant. A series of four brochure templates that provide waste reduction, recycling, household hazardous waste and environmental shopping information. To be applied in any community. (Spanish & English version available)

Tucson Clean and Beautiful, "Tucson/Pima County Waste Reduction Education Display and Brochures", 1997, Waste Reduction Initiative Through Education Grant. Display board and brochures that describe waste reduction techniques for the Pima County area. Display located at Tucson Clean and Beautiful.

#### **GUIDEBOOKS/HOW-TO MANUALS/RECYCLING CURRICULA:**

Architectural Landscaping, Inc., 1991, Reduce, Reuse and Recycle Grant. Description of designing, building and operating a desert composting facility for municipal yard waste. Reference document.

Arizona Filter Recyclers, 1994, Waste Reduction Assistance Grant. Project established centralized collection site for used oil and filters. Reference document.

Arizona Hotel/Motel Association, *Inn-Keeping with the Environment: A Waste Reduction Guidebook for the Arizona Lodging Industry*, 1997, "Waste Reduction Education Campaign for the Hospitality Industry", Waste Reduction Initiative Through Education Grant. Guide book and workshop presentation.

Cochise County and University of Arizona, *Pilot Composting of Yard Wastes at Seven Sites in Cochise County*, 1991, "Cochise County Pilot Composting of Yard Waste", Reduce, Reuse and Recycle Grant. Guide book.

Cocopai County, "Cocopai Rural Recycling Workshop", 1995, Waste Reduction Initiative Through Education Grant. Recycling workshop and information.

Cottonwood-Verde Valley Recycles, "Educational and Informational Outreach on Recycling and Waste Reduction to Residents, Schools, and Businesses of the Verde Valley", 1997, Waste Reduction Initiative Through Education Grant. Community education program and curriculum for grades K-8.

Environmental Education Exchange, *Mission 3R-A Challenge for Change, An Interactive Exploration into the World of Solid Waste and Recycling*, 1995, Waste Reduction Initiative Through Education Grant. Software program, teacher's guide and promotional brochure on interactive software program.

City of Flagstaff, "The Salvage Source, Phase 1", 1997, Waste Reduction Assistance Grant. A program that will recover leftover/overrun construction and demolition material to be auctioned later. Reference document.

Gila County Solid Waste Department, "Gila County Recycle Grant", 1997, Waste Reduction Initiative Through Education Grant. Description and slide presentation of a landfill and how it is operated, along with a fact sheet and information regarding recycling activity in the county. Designed for grades K-12.

Town of Gilbert, "Recycling Education Pilot Program", 1997, Waste Reduction Initiative Through Education Grant. Coloring/activity books for pre-school and elementary level students.

KrushKo Masonry Recycling Pilot Project (Western Block Co.), 1994, Waste Reduction Assistance Grant. Project established to demonstrate the recycling of broken blocks and concrete waste. Reference document.

Lonepine Cooperative Marketing Seminar, 1995, Waste Reduction Initiative Through Education Grant. Recycling seminar and information.

Northland Pioneer College, 1991, Reduce, Reuse and Recycle Grant. Expanded office paper recycling program to city and county offices. Reference document.

Organic Products Committee, of the Arizona Recycling Coalition, *Compost Resource Guidebook*, April 1998, Waste Reduction Initiative Through Education Grant. Guide book.

City of Phoenix, *Book Reuse Project - A How-To Manual*, 1991, "Book Bag Reuse Project", Reduce, Reuse and Recycle Grant. Grant report and guide book.

R. W. Beck and Associates, *Source Reduction and Recycling Programs: An Integrated Approach*, 1991, "R.W. Beck and Associates Source Reduction/Recycling Workshop", Reduce, Reuse and Recycle Grant. Guide book.

City of Tucson, *Ravin' About Recycling Campaign*, 1997, Waste Reduction Initiative Through Education Grant. City of Tucson Recycling Education Campaign Documents include-Master Recycler Program Training Manual, Slides of Master Recycler training, composting and recycling information brochures, and waste reduction and recycling resource listing for small businesses.

Tucson Organic Gardeners, 1995, Waste Reduction Initiative Through Education Grant. Compost education school program.

University of Arizona, *Waste Reduction Alternatives Programs (WRAP) Resource Manual and Action Plan for the Tucson Unified School District*, 1992, "University of Arizona (WRAP)", Reduce, Reuse and Recycle Grant. Guide book.

VMB Enterprises, "Grant Training Seminars", 1997, Waste Reduction Initiative Through Education Grant. Guidance for improving proposal writing.

Western Organics Inc., 1994, Waste Reduction Assistance Grant. Project to expand and upgrade biosolid (sludge) compost facility. Reference document.

White Mountain Recycling Project, 1991, Reduce, Reuse and Recycle Grant. Demonstration project of centralized recycling collection site and facility. Reference document.

#### **VIDEO TAPES:**

Alliance Marketing Southwest, "Resell, Reuse, Recycle", 1997, Waste Reduction Assistance Grant. Description of program to resell, donate and recycle used textbooks. Appeals to teachers, educators and school officials.

TV PSAs, Arizona Broadcasters Association, "Reduce, Reuse and Recycle", 1995, Waste Reduction Initiative Through Education Grant. PSAs on paper, glass, plastic and aluminum can recycling. Appeals to all ages.

TV PSAs, Arizona Clean and Beautiful, "Influence Behavior Public Service Announcements", 1998, Waste Reduction Initiative Through Education Grant  
Cowboy Campout (:30) - cowboys sitting around campfire discussing advantages of recycling to one cowboy who does not recycle; Little Boy Recycling with Neighbors (:30) - little boy recycling newspapers with neighbors and asks his father why everyone doesn't recycle; Tom Chambers Basketball Scene (:30) - friends watching basketball game on TV, Tom Chambers promotes the advantages of recycling to one friend who does not recycle. Humorous description of community involvement with recycling. Appeals to all ages. (2 copies)

City of Flagstaff Clean and Green, "Waste Reduction for Small Business", 1992, Reduce, Reuse and Recycle Grant. Waste reduction and recycling tips for small businesses. Appeals to small business owners. (14:52) (3 copies)

Mesa High School, "Project Earthship 1996-1997", 1995, Waste Reduction Initiative Through Education Grant. Information about Mesa High School Project Earthship. Demonstrates start-up and construction process. Appeals to high school students and educators.

Phoenix Clean and Beautiful, "The Valley Shares", 1997, Waste Reduction Assistance Grant. Information on how individuals, businesses and organizations can help recycling by donating office equipment, supplies, etc. to The Valley Shares program. Also it explains how non-profit/charitable organizations can benefit by using their program to obtain office equipment, etc. Appeals to businesses, educators, charitable organizations and adults.

City of Tucson, "ReThink It Pilot Project"

Program description and operation information. 1994. Appeals to adults. (4:23)

TV PSAs, City of Tucson, "Ravin' About Recycling", 1998, Waste Reduction Initiative Through Education Grant. City of Tucson Recycling Education Campaign documents- campaign binder, Master Recycler Program Training Manual, Slides of Master Recycler training, composting and recycling information brochures and waste reduction and recycling resource list for small businesses. Appeals to all ages. 4 PSAs, 1 in Spanish

Tucson Organic Gardeners, "Home Composting in the Desert", 1991, Reduce, Reuse and Recycle Grant. Information guide to backyard composting of yard trimmings and kitchen wastes. Appeals to all ages and educators. (2 copies, 1 in Spanish)

### **SLIDES:**

Gila County, 1998, Waste Reduction Initiative Through Education Grant. Slide presentation of landfill in Payson, Arizona. Recycling education program for county schools and the general public.

City of Tucson, "Ravin' About Recycling", 1998, Waste Reduction Initiative Through Education Grant. City of Tucson Recycling Education Campaign documents- campaign binder, Master Recycler Program Training Manual, Slides of Master Recycler training, composting and recycling information brochures and waste reduction and recycling resource list for small businesses. Appeals to all ages.

### **AUDIO TAPES:**

Radio PSAs, Cottonwood-Verde Valley Recycles, "Compost and Recycling Program", 1998, Waste Reduction Assistance Grant. PSAs for recycling in Cottonwood/Verde Valley area - "Fairy Mulch Mother", "Recycling Rap" and "Sounds of Recycling". (4 copies)

Radio PSAs, Cottonwood-Verde Valley Recycles, "Compost and Recycling Program", 1998, Waste Reduction Assistance Grant. PSAs for recycling in Cottonwood/Verde Valley area - "Fairy Mulch Mother" only.

**SOFTWARE PROGRAM:**

Environmental Education Exchange, "Mission 3R - A Challenge for Change", 1995, Waste Reduction Initiative Through Education Grant. Interactive software program for elementary and middle-school students, teachers and youth workers. Software program, teacher's guide and promotional brochure. Appeals to children ages 6-14, teachers, educators and adults. (PC and Mac version available)

**OTHER RESOURCES:**

Arizona State Recycling Emblem, 1994 trademark. Emblem can be used by any Arizona organization for use in promoting recycling and waste reduction efforts. To obtain an electronic or hard copy version, please call (602) 207-4865.

Arizona State University, *The Arizona Recycling Review Newsletter*, 1991, Reduce, Reuse and Recycle Grant. Quarterly newsletters on solid waste reduction and recycling awareness projects in Arizona. Contract agreement from 1992 through 1999. Selected Volumes 1992-1999 available.

Arizona Waste Exchange, 1992, Reduce, Reuse and Recycle Grant. An electronic catalogue designed to bring waste generators and potential users of this waste together.